- (21) Application No 8815715
- (22) Date of filing 1 Jul 1988
- (30) Priority data (31) 8715537
- (32) 2 Jul 1987
- (33) GB
- (71) Applicant **Paul Turner** 84 Barton Road, Luton, Bedfordshire
- (72) Inventor **Paul Turner**
- (74) Agent and/or Address for Service Pollak Mercer & Tench Eastcheap House, Central Approach, Letchworth, Hertfordshire, SG6 3DS

- (51) INT CL4 B60P 3/34
- (52) Domestic classification (Edition J): B7B 291 343 HD
- (56) Documents cited

GB 0926369 US 3934924 **GB 0869858** US 3720438

GB 0350201

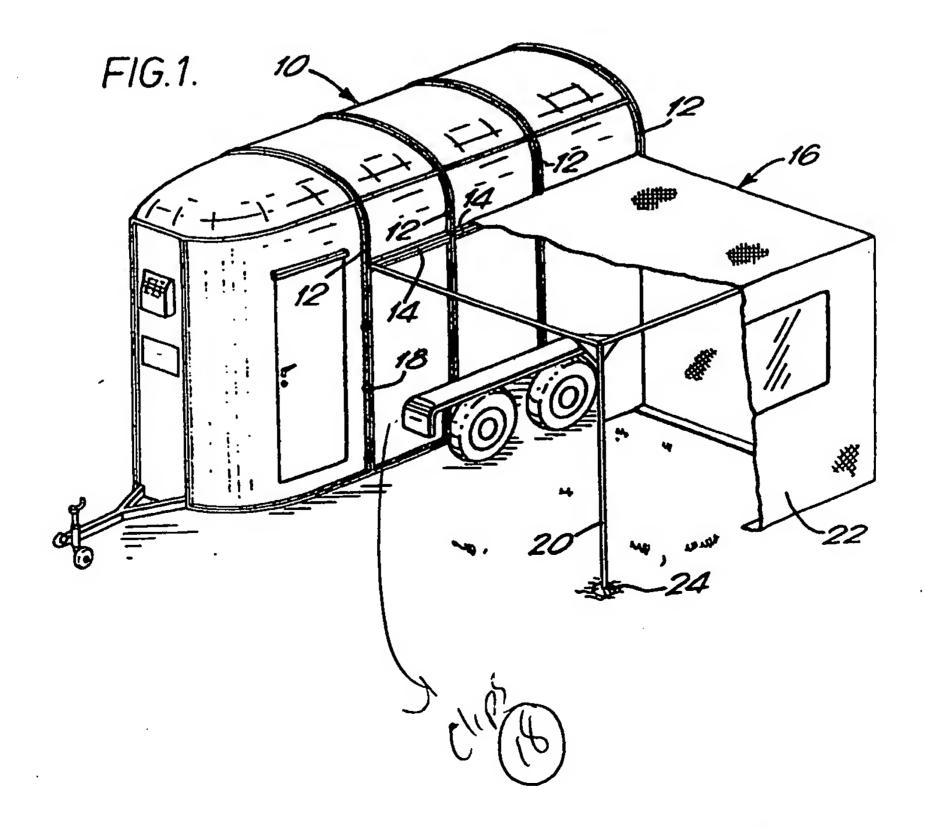
(58) Field of search

B7J **B7B** 

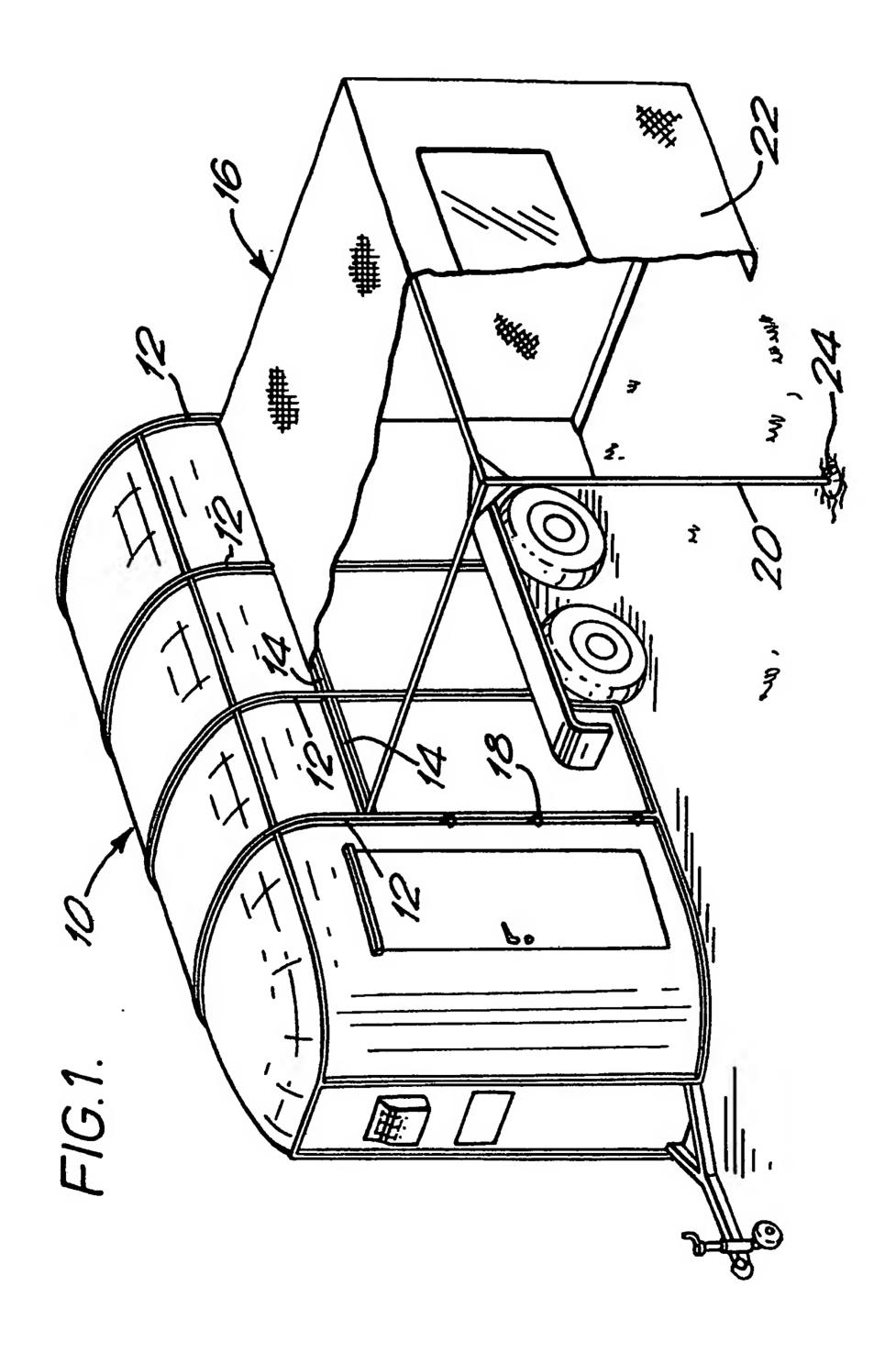
Selected US specifications from IPC sub-classes

BEOP BEOJ

- (54) Horse box awning fixture
- (57) The exterior of the vehicle 10 includes a plurality of outwardly projecting longitudinal strengthening members 12 extending between the top and bottom of the side wall. Rigid adaptor means 14 are employed to span a preselected number of the longitudinal members so as to provide a surface for attachment of a rectilinear portion of the shelter 16.



GB 2 207 893 A



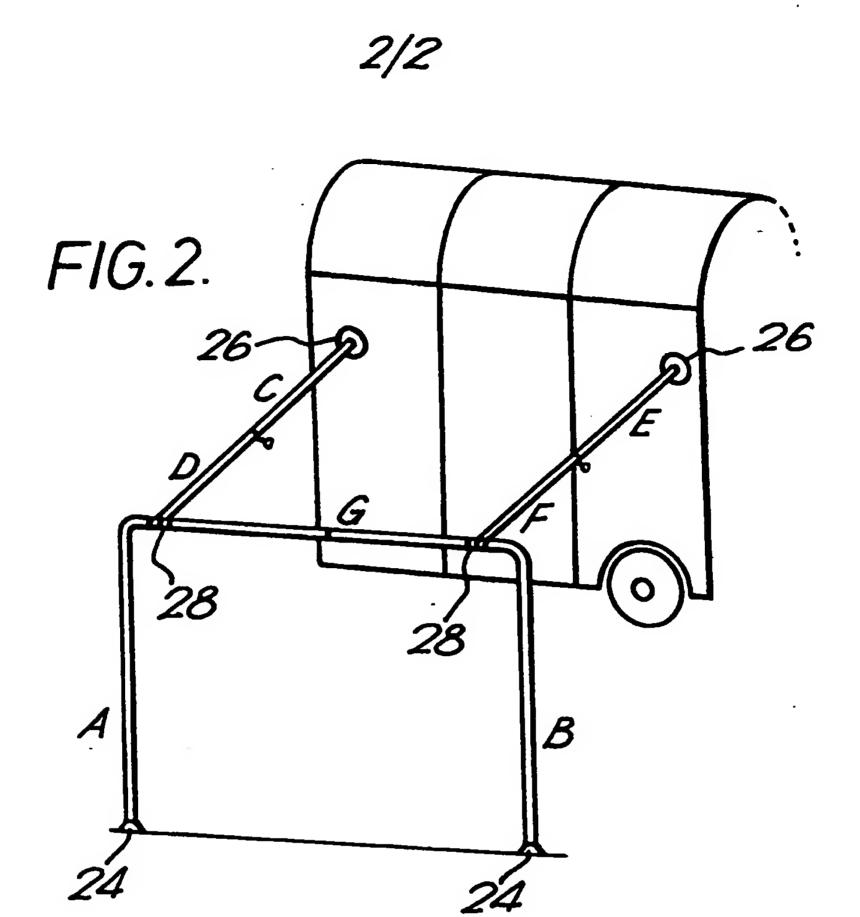


FIG. 3(a).

FIG. 3(b).

## IMPROVEMENTS IN AND RELATING TO VEHICLES SPECIFICATION

7

This invention relates to vehicles, and is particularly concerned with the provision on or for a 5 vehicle of a place of shelter, for instance an awning, adjacent the vehicle. Such vehicles may include vans, trailers, trucks and lorries, for instance for the transportation of animals such as horses or livestock. The invention is especially concerned with attaching 10 awnings or tents to horseboxes.

Horseboxes, particularly horseboxes of the smaller type, have little or no free space within the horsebox itself, which means that those people travelling with the horse or horses have problems in finding somewhere to sit and rest, or somewhere to change their clothing, etc. particularly at outdoor equestrian events where communal facilities may be poor or non-existent.

It is an object of the present invention to provide an awning adapted for use with a horsebox or similar 20 other vehicle to provide a shelter linked to and immediately adjacent the vehicle.

It is a further object of the present invention to provide, in combination, a horsebox or similar vehicle and an awning adapted to be secured thereto to provide 25 a shelter immediately adjacent the vehicle.

One reason why awnings have previously not been provided for horseboxes or similar other vehicles is that horseboxes conventionally have a number of projecting ribs spaced along the length of the box and 30 running from the chassis up the sides of the box and over the roof. These are primarily to reinforce the structure but they do mean that the sides of the horsebox are not flat.

Thus, it is a further object of this invention to 35 overcome this problem in horseboxes or other vehicles

having similar ribs.

According to one aspect of the invention there is provided a vehicle comprising a body with a roof, a side wall the exterior of which includes a plurality of outwardly-projecting longitudinal members disposed in the space between the top and bottom of the side wall, and rigid adaptor means spanning a preselected number of the longitudinal members so as to provide a surface for attachment of a rectilinear portion of the shelter, the rigid adaptor means having an interior configuration appropriate to the confronting side wall.

Thus a shelter can be put up as an annex beside the vehicle when stationary. One or more of the side walls of the vehicle may be used to support one or more 15 shelters. Such shelters are especially useful for vehicles in the form of horseboxes and advantageously provide the people accompanying the horse(s) with accommodation.

According to a second aspect of the invention there
20 is provided a conversion kit for adapting at least one
side wall of a vehicle, the exterior of the side wall
including a plurality of outwardly - projecting
longitudinal members disposed in the space between the
top and bottom of the side wall, so that the side wall
25 is connectable to a shelter, the kit comprising rigid
adaptor means for spanning a preselected number of the
longitudinal members so as to provide a surface for
attachment of a rectilinear portion of the shelter, the
rigid adaptor means having an interior configuration
30 appropriate to the confronting side wall.

This kit overcomes the problem of conventional vehicles as defined above and enables them to be converted into a form in which a shelter can advantageously be put up as an annex beside the vehicle whenever required. The vehicle will usually be pre-

3

converted so that following conversion the shelter can be put up whenever convenient.

The shelter may advantageously comprise an awning or tent, typically comprising a framework and a 5 covering, an edge of which is in use attached to the rigid adaptor means.

Preferably the framework comprises support members defining in use a roof space and legs which are spaced from the side wall of the vehicle defining in use side 10 wall spaces of the shelter, and the covering occupies these spaces, the edges of the covering confronting the vehicle being fastened thereto in use. Such fastenings may be made from inside or outside the vehicle.

The rigid adaptor means may be connectable with 15 either the framework of the shelter or the covering of the shelter. The adaptor means may be fastened to the shelter by any suitable means which allow the shelter to be put up and/or taken down whenever required. Such fastening means may be discrete or continuous. 20 Preferably the shelter is slidingly fastened to the adaptor means.

The rigid adaptor means may be connectable either when the shelter is put up or previously on its external side to an intermediate support member which 25 is connectable, when the shelter is put up or previously (if the intermediate member is not connected with the adaptor at the previous time), to the shelter.

The intermediate member may comprise runner means for slidingly receiving a confronting edge of the 30 shelter, for instance having either a channel portion or a protuberance to receive a complementary portion on the shelter.

The rigid adaptor means may include one or more base portions of hard wood which may be waterproofed by 35 sealant. The rigid adaptor means may comprise one or

~

more base portions with said runner means attached thereto. A single rigid adaptor means may be employed to fit across and over the longitudinal members on the side wall of the vehicle or separate such adapters may be received in the spaces between adjacent longitudinal members. The or each rigid adaptor means may be bolted to the vehicle.

In order that the invention may be more fully understood, one presently preferred embodiment in accordance with the invention will now be described by way of example and with reference to the accompanying drawings of which Figure 1 shows an awning, partly broken away, fitted to a horsebox; Figure 2 shows a framework for use in the invention; and Figures 3(a) and 3(b) show fastening elements for use in the invention.

There is shown in the drawing a horsebox, indicated generally at 10. The horsebox is of conventional construction and includes a number of transverse ribs or bars 12 which project proud of the surface of the horsebox, up the side walls and over the roof, to serve as a reinforcement for the structure. These ribs 12 are permanently fastened to the chassis of the vehicle.

Thus, the side of the horsebox has a number of recessed zones defined by the ribs 12. A specially shaped adaptor or adapters 14 is/are fitted horizontally along the side of the horsebox to span the ribs 12 at a height commensurate with that of an awning which is to be attached to the horsebox, say 7 feet (2.14 metres). The adaptor 14 is a rigid member and has on one side a configuration which is complementary to the configuration of the side wall of the horsebox and provides on the other side a flat surface on to which the awning proper can be fitted.

The awning, which is indicated generally at 16, is

47

\*

dimensioned so as to extend between two of the aforesaid ribs 12. In the drawing the awning is shown as extending from the front rib to the back rib of the horsebox.

The two ribs 12 which define the ends of the awning are provided along their length, down the side of the horsebox, with a number of clips 18. The awning 16 comprises a framework formed by a plurality of metal support members 20, for example struts, poles or bars, which are interconnected to define a shelter zone, and an appropriate covering 22, typically of canvas or synthetic weatherproof material is provided over the framework.

The covering is in the form of a three-sided tent

15 and includes at least one window and a door in its side
walls. The free edge of the roof of the covering is
attached to the adaptor(s) on the side wall of the
horsebox via a longitudinal runner member into which
the edge is slidingly received and which is itself

20 slidingly received in the adaptor(s). The framework is
used to support the covering and could be integral with
the covering.

The clips 18 are used to connect the confronting vertical edges of the covering 22 to the vertical ribs 12 on the side wall of the horsebox. The vertical support members 20 of the framework may be provided with feet 24 to prevent the poles from sinking into the ground.

The base edges of the covering are pegged to the 30 ground. Elasticated tensioners may be arranged along these edges.

Because horseboxes of various different dimensions are available, the adaptor/connector 14 is shaped to match the particular configuration of the side wall of the specific horsebox in question. A "standard" awning

16 can then be fitted to the individual adaptor 14.

A particular form of framework which can be employed in the embodiment just described is shown in Figure 2. The framework consists of seven interconnecting poles A - G. The poles C, E adjacent the horsebox have at their free ends suction pads 26 by which they are attached to the side wall of the horsebox. Means for tensioning these poles, such as thumb screws, against the horsebox, may be provided. The poles D, F next to these end poles C, E are connected with the remaining interconnecting roof pole G by E-shaped gripping means 28.

Further methods of connection of the side edges of the covering to the vehicle which may be employed are now described. The ribs or the side wall itself may be drilled to provide apertures for fastening elements for example clips 30 which may be positioned from inside the vehicle or by hooked - bolts 32, illustrated respectively in Figures 3(a) and 3(b), which may be positioned from inside or outside the vehicle.

It will be appreciated that various alternative ways of putting the invention into practice can be envisaged within the scope of the present invention, and it is not the intention that the invention should be limited to the particular embodiment described above and shown in the drawing except as provided by the claims.

÷.

## CLAIMS

- 1. A vehicle comprising a body with a roof, a side wall the exterior of which includes a plurality of outwardly projecting longitudinal members disposed in
- 5 the space between the top and bottom of the side wall, and rigid adaptor means spanning a preselected number of the longitudinal members so as to provide a surface for attachment of a rectilinear portion of the shelter, the rigid adaptor means having an interior
- 10 configuration appropriate to the confronting side wall.

  2. A vehicle according to claim 1, wherein the shelter comprises a framework and a covering, an edge of which is in use attached to the rigid adaptor means.
- 3. A vehicle according to claim 2, wherein the 15 framework comprises support members defining in use a roof space and legs which are spaced from the side wall of the vehicle defining in use side wall spaces of the shelter, and the covering occupies these spaces, the edges of the covering confronting the vehicle being
- 20 fastened thereto in use.
  - 4. A vehicle according to claim 1, 2 or 3, wherein the shelter and the rigid adaptor means are interconnected in use via an intermediate support member.
- 5. A vehicle according to claim 4, wherein the 25 intermediate support member is in use slidingly attached to the shelter.
  - 6. A conversion kit for adapting at least one side wall of a vehicle, the exterior of the side wall including a plurality of outwardly projecting
- 30 longitudinal members disposed in the space between the top and bottom of the side wall, so that the side wall is connectable to a shelter, the kit comprising rigid adaptor means for spanning a preselected number of the longitudinal members so as to provide a surface for attachment of a rectilinear portion of the shelter, the

rigid adaptor means having an interior configuration appropriate to the confronting side wall.

- 7. A kit according to claim 6, including a further support member to be attached between the rigid adaptor 5 means and the shelter.
  - 8. A kit according to claim 7, wherein the further support member has means for sliding attachment to the shelter.
- 9. A vehicle constructed and arranged substantially as 10 herein described with reference to and as illustrated in the drawings.
  - 10. A vehicle with a shelter annexed thereto substantially as herein described with reference to and as illustrated in the drawings.
- 15 11. A conversion kit constructed and arranged substantially as herein described with reference to and as illustrated in the drawings.